COLORtube™ EQ
LED-EQ

COLORtube™ EQ Controller
LED-EQCON

USER MANUAL

32-band audio spectrum visualizer
using LED tubes

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Table of Content

BEFORE YOU BEGIN

What is included

- ➤ (4) x COLORtube™ EQ LED tubes
  (1) x LED-EQCON, (1) x 33ft Signal cable, (1) x 6.6ft Power cable
- ➤ Tube mounting hardware
- ➤ Warranty Card & User Manual

Unpacking Instructions

Immediately upon receiving a product, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

AC Power

To determine the power requirements for a particular product, see the label affixed to the back plate of the product or refer to the product's specifications chart. A product's listed current rating is its average current draw under normal conditions. All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch. Before applying power, check that the source voltage matches the product's requirement.

Safety Instructions

⚠️ Please read these instructions carefully, which includes important information about the installation, usage and maintenance? ⚠️

- Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Always make sure that you are connecting to the proper voltage and that the line voltage you are connecting to is not higher than that stated on decal or rear panel of the fixture.
- This product is intended for indoor use only!
- To prevent risk of fire or shock, do not expose fixture to rain or moisture. Make sure there are no flammable materials close to the unit while operating.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces. Be sure that no ventilation slots are blocked.

- Always disconnect from power source before servicing or replacing lamp or fuse and be sure to replace with same lamp source.
- Maximum ambient temperature is Ta: 40°C. Do not operate fixture at temperatures higher than this.
- In the event of serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled persons can lead to damage or malfunction. Please contact the nearest authorized technical assistance center.
- Always use the same type spare parts.
- Don't connect the device to a dimmer pack.
- Make sure power cord is never crimped or damaged.
- Never disconnect power cord by pulling or tugging on the cord.

Caution! **There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact CHAUVET.**

INTRODUCTION

Features

FEATURES

- 32-band LED-tube audio spectrum visualizer
- 144 LEDs total
  - Red (48), Green (48) and Blue (48)
- Ultra bright LEDs
- 16 patterns, chases, color flows with variations plus blackout
- Low power consumption
- Up to 100,000-hour LED life span
- Master/Slave mode

ADDITIONAL FEATURES

- Tube composition: milky white UV coated optically diffused polycarbonate
- Easy installation, energy saving and eco-friendly
- Water resistance rating: IP33
- Temperature range: -20°C to +45°C

Product Overview
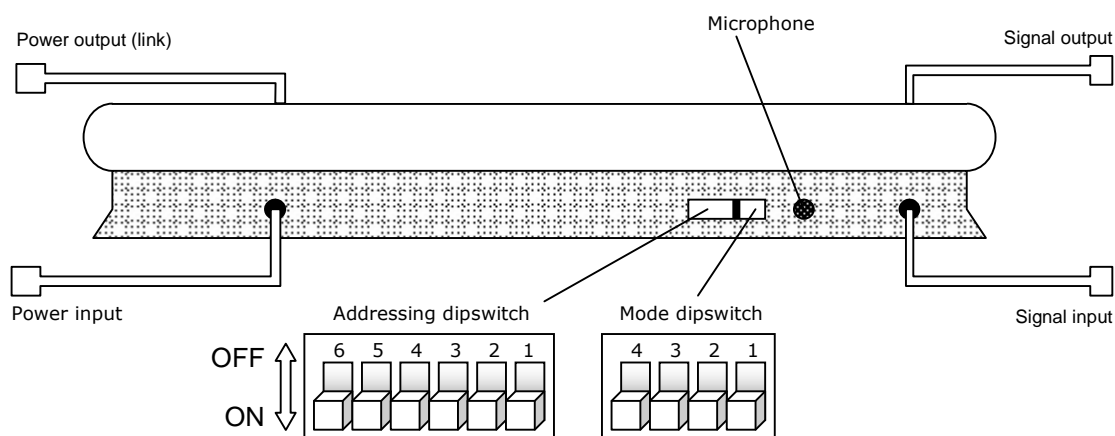
SETUP

Power

The COLORtube™ EQ can operate in voltages between 100V~240V 50Hz or 60Hz. It is equipped with an auto sensing transformer.

- To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixture's specifications chart.
- A fixture's listed current rating is its average current draw under normal conditions.
- All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch.
- Before applying power to a fixture, check that the source voltage matches the fixture's requirement.
- All fixtures must be connected to circuits with a suitable Earth Ground

Power Cable Configuration

CABLE (EU)	CABLE (US)	PIN	INTERNATIONAL
BROWN	Black	Live	L
BLUE	White	Neutral	N
YELLOW/GREEN	Green	Earth	EG (Ground)

Mounting

Main plate

Locking plates

Center plate mounting hole

Flat mounting surface

Place the LED tube on a flat surface and position both mounting plates at opposite ends. Using a pencil trace out the area of the mounting plates so that you can return the plate to the same location in order to screw or affix it to the surface.

Once both plates are affixed to a permanent surface, place the tube directly over the plate and assemble the remaining hardware as illustrated.

Also notice the orientation of the locking plates.

OPERATING INSTRUCTIONS

The COLORtube™ EQ system is made up of up to 32 LED tubes whose primary function is to display a 32-band audio spectrum visualizer. The COLORtube™ EQ tube will operate in both Stand-Alone and Master-Slave operation.

Connection Diagram

Power

Continue chain…

Standard addressing method, 32 tube count 0 1 2 3 4 5 6 7 8 9 · · · · · · · · · 31

Double-up addressing method, 64 tube count 0 0 1 1 2 2 3 3 4 4 · · · · · · · · · 31

COLORtube™ EQ

Read about fixture addressing and settings in the sections following…

Optional controller

ENLARGE YOUR DISPLAY!

For a larger display double up addresses and connect 64 tubes instead of 32.
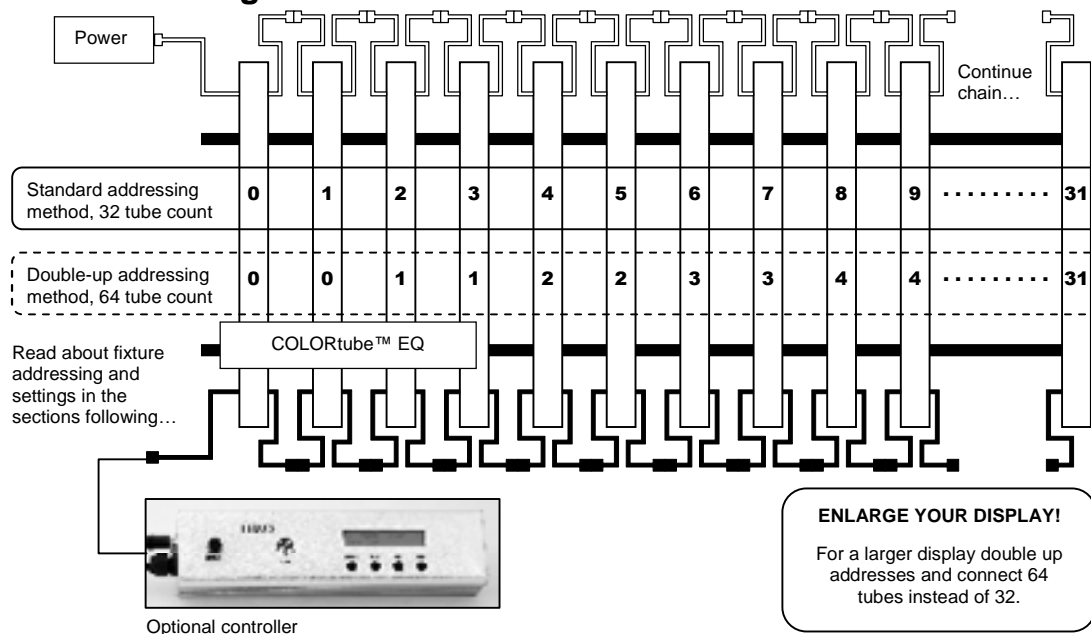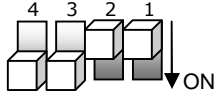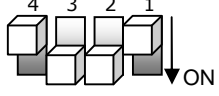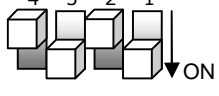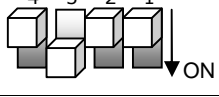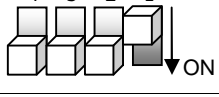
Operation

There are 16 programs within 8 different operating modes built into the PC board on the LED tube. These programs can be initiated via the **Mode** dipswitches. For correct presentation of the sound spectrum it is important to address each tube in numerical order and in the manner illustrated above.

Program modes dipswitch chart

MODE	PROGRAM	BACKGROUND COLOR	ACTIVE COLOR	MODE DIPSWITCH
0	0	Red	Green	
	1	Green	White	
	2	Blue	Red	
	3	White	Red	

	4	Black	Red	
1	5	Black	Green	
	6	Black	Pink	
	7	Black	Yellow	
2	8	Black	Green/Red	
	9	Black	Cyan/Red	
	10	Black	Blue/Red	
3	11	Black	Rainbow Chase	
4	12	Black	Red/Green/Cyan/Blue Chase	
5	13	Black	Dot Chase	
6	14	Change colors	Color Chase	
7	15	Change colors	Automatic	

Fixture Addressing

1. Dipswitch 1 is reserved for setting the type of control mode on each tube.

2. Set dipswitch 1 to ON for SLAVE operation.

3. Set dipswitch 1 to OFF for MASTER or stand-alone fixture operation.
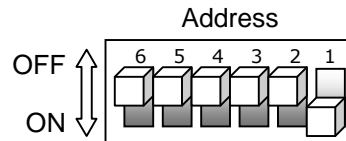
Address

Fixture	Address	Fixture	Address
0		16	
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		31	

COLORtube™ EQ Controller

Power input

Power indicator led

Sound sensitivity control

Microphone:

Always position facing the
sound source and at a
distance, no farther than 5
meters or 16.4 feet.

Control panel buttons:

Mode
Set
Up
Down

Signal output
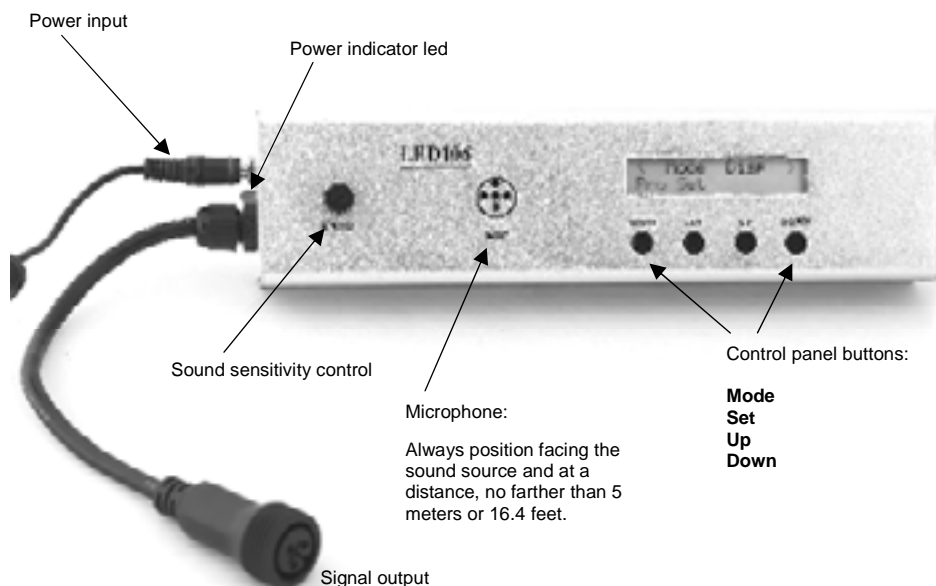
Controller options

FUNCTION	DESCRIPTION
Mode Disp	User selectable built in programs in the controller
Cycle Motion	All built in programs will cycle through at an interval time entered by the user between 1 and 255 minutes

Setup

To operate with controller all tubes must be set to the SLAVE mode, (address dipswitch # 1 set to the ON position) and each fixture should be addressed in numerical order for best presentation.

Operation

1. Press the **Mode** button to cycle through either {Mode Disp} or {Cycle Motion}. Leave on the item you wish to select.

2. Press the **Set** button to enter selection.

3. Use the **Up/Down** buttons to toggle or change values within the selected program function. This could be either changing built it programs or changing interval time.

4. In case of {Mode Disp} option a final press of the **Set** button is necessary to confirm the selection.

Controller programs (chart)

PROGRAM	DISPLAY	BACKGROUND COLOR	ACTIVE COLOR
01	Red & Green	Red	Green
02	Green & White	Green	White
03	Blue & Red	Blue	Red
04	White & Red	White	Red
05	Red	Black	Red
06	Green	Black	Green
07	Purple	Black	Purple
08	Yellow	Black	Yellow
09	Green & Dot	Black	Green w/red dot
10	Cyan & Dot	Black	Cyan w/red dot
11	Blue & Dot	Black	Blue w/red dot
12	Synch Colors	Black	Changing solid colors
13	Synch Dot	Black	Changing colors/w red dot
14	Synch Cross	Black	Changing colors cross back & forth
15	Refur Colors	Changing colors	Changing colors
16	Auto Motion	Black	Changing colors, dots and solids
17	Black		

APPENDIX

Returns Procedure

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Merchandise Authorization Number (RA #). Products returned without an RA # will be refused. Call CHAUVET and request RA # prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. CHAUVET reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Claims

Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise. It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Any other claim for items such as missing component/part, damage not related to shipping, and concealed damage, must be made within seven (7) days of receiving merchandise.

Technical Specifications

WEIGHT & DIMENSIONS

.... **(COLORTUBE™ EQ)**
Length... 1000 mm (39.37 in)
Width...50 mm (5.13 in)
Height ....95 mm (2.75 in)
Weight... 1.8 Kgs (4.0 lbs)
....**(CONTROLLER)**
Length... 235 mm (9.25 in)
Width...45 mm (1.77 in)
Height ....60 mm (2.36 in)

POWER

.... **(COLORTUBE™ EQ)**
Auto sensing transformer (internal) .... 90V ~ 240V 50/60 Hz
AC input (US).. IEC female
Current draw .... (peak < 20W)
....**(CONTROLLER)**
Operating Voltage .... 12V DC
Current draw .... (peak < 2W)

ENVIRONMENT (LED TUBE)
Operating temperature ....-20°C to +45°C
Protection rating... IP33 (Interior use)

PHOTOMETRIC (LED TUBE)
Quantity of LEDs..144 (Red 48, Green 48, Blue 48)

ORDERING INFORMATION
COLORtube™ EQ... LED-EQ
COLORtube™ EQ Controller ....LED-EQCON
Signal Cable Extension 15'.. LED-SIG15A
Signal Cable Extension 5' LED-SIG5A

Technical Support

Address: Service Dept.
                  3000 N 29th Ct, Hollywood, FL 33020 (U.S.A.)
Support (Email): tech@chauvetlighting.com
Telephone: (954) 929-1115 - (Press 4)
Fax: (954) 929-5560 - (Attention: Service)
Website: http://www.chauvetlighting.com